

Emerson™ HF Series

balanced port thermal expansion valve



The ultimate in reliability and flexibility from Emerson Climate Technologies

When it comes to protecting food there's no such thing as cutting corners on quality. Supermarket operators depend on their refrigerators and freezers to be up and running, every hour of every day - even in the toughest retail environments, and you need solutions you can count on, especially when it comes to the refrigeration equipment that you service. We know you need to provide unsurpassed reliability that can keep food at just the right temperature, the kind of reliability that can also help lower maintenance costs. This is exactly the kind of reliability that comes with the Emerson HF Series thermal expansion valve.

The Emerson HF thermal expansion valve is offered several ways:

- Pre-packaged service kits - Include a mix of bodies and power elements with a complete set of cages to serve the most applications with a minimum of parts.
- Individual components - Bodies, cages, & power elements may be ordered separately and can be used to build personalized service kits or replenish pre-packaged kits.
- Finished valves - Assembled valves ready for immediate installation. All HF valves use a balanced port cage design that compensates for changes in operating pressures due to varying ambient temperatures, gas defrost, heat reclaim, or widely varying evaporator loads.

Supermarket reliability

The HF Series thermal expansion valve brings Emerson's proven technology to supermarket installations. It's a time-tested technology that brings you and your business a unique combination of reliability and performance that not only reduces spoilage, but also cuts the hassle and expense of time-consuming maintenance.

HF valves have been designed and built to eliminate refrigerant leakage and minimize corrosion. The technology of the HF Series thermal expansion valve enables it to provide an extra safety factor for extreme operating environments in high ambient and dirty working environments.



Feature	Benefit
Interchangeable cages, power assemblies and valve bodies	Allows service of most valves without brazing
Stainless steel power element	Eliminates power element failures caused by corrosion
Easy-to-remove power element	No special tools needed
Fine setpoint adjustment threads	Easy to calibrate superheat
Balanced port and bi-flow capability	Flexible application
Removable strainer	Prevents contaminants from clogging valve

Options

- ODF or SAE connections
- Straight-through or angle flow configurations
- Removable inlet strainer available (ODF only)
- Internal or external equalizer

Specifications

- Maximum working pressure: 450 psig
- Operating Temperature: -40°F to 50°F
- Use with R-22, R-134a, R-404A, R-507, R-12, R-502, R-407

Nomenclature example: HFESC 2 HC 5 FT 3/8 X 1/2 ODF S/T

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HF	N	E	S	C	B	2	H	C	5 FT	3/8 X 1/2	ODF	S/T
Valve Series	Superheat Adjustment	Equalizer	Connection Type	Removable Inlet Strainer (optional)	Bleed Hole (optional)	Capacity Nominal Rating in Tons	Refrigerant Code	Charge Code	Capillary Tube Length	Inlet x Outlet Connection	Connection Type	Configuration
Balanced Port Design	N=Non-adjustable (Omit for adjustable)	E=External (Omit for Internal)	S=solder (Omit for SAE Flare)	C=Inlet Strainer (ODF only)	(Omit for no bleed hole)		F = R12 H = R22 M = R134a N = R407C P = R507 R = R502 S = R404A Z = R410A	C=medium temp CA=heat pump W(MOP)=press. limiting Z=low temp AA=wide range	5 FT (std) other lengths are available	1/4 x 3/8 3/8 x 1/2	SAE = flare ODF = solder	S/T = straight thru ANG = 90° angle

1/8 – 13 ton R-404A capacity

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